LIGHTING FIXTURE SCHEDULE LAMPS BALLAST TRIM COLOR MOUNTING FIXTURE DESCRIPTION REMARKS DIFFUSING CATALOG MEDIUM NUMBER INEAR ROUND ASYMMETRIC WALL WASH FIXTURE. INTEGRAL T8/841 COVE T8/841 2'X4' 2-LAMP HIGH-EFF. VOLUMETRIC TROFFER INTEGRAL RECESSED 6" LED-ENGINE CAN. NON-FEROUS RECESSED A19 LENS 1010 U6T8/841 1010 INTEGRAL RECESSED 2'X2' 2-LAMP HIGH-EFF, VOLUMETRIC TROFFER U6T8/841 2'X2' 2-LAMP HIGH-EFF. VOLUMETRIC TROFFER INTEGRAL INTEGRAL 6" 2-LAMP RECESSED OPEN CAN FIXTURE RECESSED 13W QPL / 841 T8/841 1'X4' 1-LAMP HIGH-EFF. VOLUMETRIC TROFFER INTEGRAL RECESSED U6T8/841 1 2'X4' 2-LAMP HIGH-EFF. VOLUMETRIC TROFFER INTEGRAL RECESSED U6T8/841 CHAINS/SUSP. 1' X 4' INDUSTRIAL STYLE WITH CHAIN SUSP. NDNE 14" BLDG. MTD. WALL FXT., TYPE IV DOWN DIS EMERGENCY INTEGRAL 42W QPL / 841 WALL LED WITH UNIT RED LETTERS UNIVERSAL DIE-CAST ALUM, EXIT SIGN NO BATT. 1 FACE LED WITH UNIT RED LETTERS DIE-CAST ALUM, EXIT SIGN NO BATT, 2 FACES UNIVERSAL SCHEDULE NOTES: FIXTURES WITH AN "B" DESIGNATION INDICATE 10% DIMMABLE FLUORESCENT BALLASTS. FIXTURES WITH AN "A" DESIGNATION INDICATE EMERGENCY BALLASTS. R3B FIXTURES IN PATIENT HOLDING AREAS ARE NON-EMERGENCY, AND SHALL HAVE 10% DIMMABLE BALLASTS. THESE FIXTURES, LOCATED ABOVE CT SCANNER, REQUIRE SPECIAL "NATURE SCENE" LENSES, PROVIDE SAMPLE TO THE COR (SAMPLE OF LENS SELECTION) PRIOR TO ORDERING MATERIALS.

ELECTRICAL SYMBOLS LEGEND

F1 LIGHTING FIXTURE — CAPITAL LETTER INDICATES TYPE. SEE OF FIXTURE SCHEDULE FOR DETAILS. FLUORESCENT FIXTURE WITH INTEGRAL EMERGENCY BATTERY

K1**OH** WALL MOUNTED FIXTURE.

EXIT LIGHT — ARROWS AS INDICATED.

POLE MOUNTED FIXTURE - REFER TO FIXTURE SCHEDULE AND

20A, 120-277V SINGLE POLE SWITCH. MOUNT AT 48" A.F.F. HUBBLE #1221I.

EMERGENCY BATTERY PACK MOUNTED PER A.D.A.

20A, 120-277V THREE WAY SWITCH. MOUNT AT 48" A.F.F. HUBBELL #1223I.

20A, 120-277V FOUR WAY SWITCH. MOUNT AT 48" A.F.F. HUBBELL # 1224I.

20A, 120-277V SINGLE POLE SWITCH WITH PILOT LIGHT. MOUNT AT 48" A.F.F. HUBBELL #1221PL. DIMMER SWITCH - REFER TO DRAWING NOTES FOR TYPE.

MOUNT AT 48" A.F.F. MANUAL STARTER SWITCH - SQUARE D CLASS 2510 TYPE FS1P.

MOUNT AT 48" A.F.F. 20A, 125V DUPLEX RECEPTACLE. MOUNT AT 18" A.F.F. HUBBELL

20A, 125V DOUBLE DUPLEX RECEPTACLE. MOUNT AT 18" A.F.F. HUBBELL #5362I.

20A, 125V DUPLEX RECEPTACLE WITH ISOLATED GROUND. MOUNT 18" A.F.F. HUBBELL #IG5362.

20A, 125V DOUBLE DUPLEX RECEPTACLE WITH ISOLATED GROUND. MOUNT 18" A.F.F. HUBBELL #IG5362.

20A, 125V DUPLEX RECEPTACLE MOUNTED ABOVE COUNTER. HUBBELL #5362I.

20A, 125V DUPLEX RECEPTACLE WITH ISOLATED GROUND MOUNTED ABOVE COUNTER. HUBBELL #IG5362.

20A, 125V GFCI DUPLEX RECEPTACLE MOUNTED ABOVE COUNTER OR AS NOTED. HUBBELL #GF53621.

20A, 125V GFCI DUPLEX RECEPTACLE WITH WP ENCLO-SURE. MOUNT AT 12" ABOVE FINISHED GRADE. HUBBELL #GF53621.

SPECIAL RECEPTACLE - TYPE AS INDICATED.

FLUSH FLOOR BOX FOR ELECTRIC SERVICE - REFER TO DRAWING NOTES FOR BOX, RECEPTACLE AND COVER TYPE.

20A, 125V SINGLE RECEPTACLE. MOUNT AT 18" A.F.F. HUBBELL

CORD REEL RECEPTACLE - REFER TO DRAWING NOTES. CLOCK OUTLET WITH SIMPLEX 2975-9038 CLOCK & 6310-4017

TELEPHONE OUTLET. MOUNT AT 18" A.F.F. "W" = MOUNT 48" A.F.F. PROVIDE 1' EMPTY CONDUIT TO ABOVE REMOVABLE

DATA OUTLET. MOUNT AT 18" A.F.F. OR AS NOTED. PROVIDE

COMBINATION DATA/TELEPHONE OUTLET

FLUSH FLOOR BOX FOR COMMUNICATIONS SERVICES - REFER TO DRAWING NOTES FOR BOX, JACK AND COVER TYPES.

FIRE ALARM PULL STATION. MOUNTING HEIGHT PER A.D.A.

FA AUDIO/VISUAL INDICATING DEVICE. MOUNTING HEIGHT PER

FA VISUAL INDICATING DEVICE. MOUNTING HEIGHT PER A.D.A.

HEAT DETECTOR. SMOKE DETECTOR.

DUCT SMOKE DETECTOR.

SPRINKLER VALVE TAMPER SWITCH. FURNISHED BY FIRE PROTECTION CONTRACTOR - WIRED BY ELECTRICAL CONTRACTOR.

SPRINKLER FLOW SWITCH. FURNISHED BY FIRE PROTEC-TION CONTRACTOR - WIRED BY ELECTRICAL CONTRACTOR. DRY SPRINKLER PRESSURE SWITCH. FURNISHED BY FIRE

PROTECTION CONTRACTOR — WIRED BY ELECTRICAL CONTRACTOR. SPRINKLER SUPERVISORY VALVE - POST INDICATOR -

FURNISHED BY FIRE PROTECTION CONTRACTOR — WIRED BY ELECTRICAL CONTRACTOR. CEILING SPEAKER WITH INTEGRAL VOLUME CONTROL: FOURJAY #SDTP3-CR8 WITH VOLUME CONTROL OR EQUAL.

FOURJAY #PH8-4X ENCLOSURE OR EQUAL. CEILING SPEAKER WITHOUT INTEGRAL VOLUME CONTROL: FOURJAY #SDTP3-CR8 OR EQUAL. FOURJAY #TB8X T-BAR SUPPORT OR EQUAL.

FOURJAY #PH8-4X ENCLOSURE OR EQUAL.

FOURJAY #TB8X T-BAR SUPPORT OR EQUAL.

CARD READER / PROXIMITY READER

NURSE CALL DEVICE

DOME LIGHT (NURSE CALL)

NURSE CALL PULL CORD DEVICE

POWER SUPPLY FOR ELECTRIC LATCH.

EQUIPMENT CONNECTION. TYPE AS INDICATED.

PUSHBUTTON CONTROL. REFER TO DRAWING NOTES.

DOOR CONTACT. DISONNECT SWITCH. REFER TO DRAWING NOTES.

COMBINATION MAGNETIC STARTER. REFER TO MECHANICAL QUIPMENT SCHEDULE FOR SIZE AND TYPE..

NURSE CALL MASTER STATION.

208Y/120V, 3PH, 4W PANEL.

480Y/277V, 3PH, 4W PANEL.

JUNCTION BOX. CIRCUITRY - EXPOSED OR ABOVE CEILING

— CIRCUITRY - CONCEALED IN FLOOR OR RUN UNDER-GROUND CIRCUIT HOMERUN. LETTERS REFER TO PANEL ID, NUMBERS

ELECTRICAL DRAWING NOTE.

ELECTRICAL DEMOLITION NOTE.

REFER TO CIRCUIT.

WEATHERPROOF.

ABOVE FINISHED FLOOR.

OCCUPANCY SENSOR LIGHTING CONTROL

GENERAL NOTES - ELECTRICAL

A. THE ELECTRICAL CONTRACTOR SHALL NOT REMOVE ANY ITEM OF EXISTING EQUIPMENT FROM SERVICE WITHOUT THE OWNER'S PERMIS-SION. ALL OUTAGES MUST BE SCHEDULED WITH THE OWNER A MINIMUM OF FIVE DAYS PRIOR TO THE TIME THE OUTAGE IS NEEDED. ANY EXPE-NSE INCURRED BY THE OWNER DUE TO THE CONTRACTORS FAILURE TO COMPLY WITH THIS REQUIREMENT, WILL BECOME THE CONTRACTOR'S RE-SPONSIBILITY. COORDINATE MAJOR SHUTDOWNS WITH COR.

B. THE ELECTRICAL CONTRACTOR SHALL INCLUDE (IN BID) OVERTIME THAT WILL BE REQUIRED TO PERFORM WORK INVOLVING AN OFF-HOURS OUTAGE. COORDINATE ANY NIGHT / WEEKEND WORK WITH THE COR IN ADVANCE.

C. CHANGES TO THE EXISTING ELECTRIC UTILITY SERVICE MUST BE APPOVED

BY THE OWNER, THE ARCHITECT AND THE ENGINEER. BOND ALL PIPING SYSTEMS INCLUDING WATER AND GAS PER NEC ARTICLE

250-104. ACTUAL CONDUIT ROUTINGS ARE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR. COORDINATE WITH THE OTHER TRADES AND THE ARCHITECT.

ALL WIRING SHALL BE INSTALLED IN CONDUIT. WIRING RATED FOR USE IN RETURN AIR PLENUM SHALL BE PERMITTED WITHOUT THE USE OF CONDUIT WHERE INDICATED IN THE DRAWINGS AND SPECIFICATIONS.

NEW CONDUIT PENETRATIONS THROUGH ANY FIRE OR SMOKE RATED WALLS SHALL BE SEALED WITH APPROVED FIRESTOPPING MATERIAL.

H. ALL CIRCUITS SHALL HAVE A FULL-SIZE NEUTRAL. ALL FLUORESCENT AND HID LIGHTING CIRCUITS SHALL HAVE EITHER A FULL-SIZE NEUTRAL OR A SHARED NEUTRAL SIZED FOR A CAPACITY OF 200% OF THE PHASE CON-

ALL CIRCUITS SHALL INCLUDE A CODE SIZED GREEN EQUIPMENT GROUN-DING CONDUCTOR.

J. THE MINIMUM CONDUIT SIZE IS 3/4".

K. ALL EMPTY CONDUITS FOR TELEPHONE AND DATA (COMMUNICATIONS) SHALL BE STUBBED ABOVE ACCESSIBLE SUSPENDED ACOUSTIC CEILING.

L. THE MINIMUM COMMUNICATIONS CONDUIT SIZE IS 1".

M. THE ELECTRICAL CONTRACTOR SHALL VERIFY ALL MOUNTING HEIGHTS WITH THE ARCHITECT PRIOR TO ROUGH-IN.

N. RECESSED DEVICES IN WALLS MAY REQUIRE SHALLOW BOXES. VERIFY WITH ARCHITECTURAL DRAWINGS.

). WALL MOUNTED OUTLETS AND SWITCHES ARE TO BE INSTALLED WITH MIN-

IMUM SEPARATION IN DUAL OR MULTIPLE PLACEMENT CONDITIONS USING A

SINGLE PLATE WHERE APPLICABLE. THIS INCLUDES COMMUNICATIONS OUT-LETS AND SPEAKER VOLUME CONTROLS. P. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL LIGHTING FIXTURES, MOUNTING ACCESSORIES, ELECTRONIC BALLASTS,

COLOR CORRECTED LAMPS, FUSES, ETC., FOR A COMPLETE INSTALLATION.

REFERENCE ARCHITECTURAL REFLECTED CEILING PLANS FOR THE EXACT FIXTURE LOCATIONS AND MOUNTING HEIGHTS. VERIFY CEILING TYPE PRIOR

TO ORDERING FIXTURES. ALL FIXTURES SHALL HAVE A LABEL INDICATING LAMP TYPE AFFIXED TO THE INSIDE OF LAMP CHAMBER, OUT OF NORMAL VIEW INTO THE FIXTURE.

THE CONTRACTOR IS TO PROVIDE 10% SPARE LAMPS MINIMUM. ALL LIGHTING JUNCTION BOXES SHALL BE 4 11/16" SQUARE OR 4" OCT-TAGONAL x 2 1/8" DEEP WITH BLANK COVER UNLESS OTHERWISE NOTED.

T. FIRE ALARM WIRING WILL BE RUN IN CONDUIT ONLY.

U. USE RED JUNCTION BOXES FOR FIRE ALARM WIRING. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR ALL LINE VOLTAGE CONTROL WIRING FOR MECHANICAL AND PLUMBING EQUIPMENT. LOW VOL-TAGE CONTROL WIRING FOR MECHANICAL AND PLUMBING EQUIPMENT WILL BE THE RESPONSIBILITY OF THOSE RESPECTIVE CONTRACTORS.

THE ELECTRICAL CONTRACTOR WILL MAKE ALL REMOVALS REQUIRED FOR DEMOLITION OF THE EXISTING ELECTICAL SYSTEM OR SYSTEMS.

X. THE DRAWINGS AND SPECIFICATIONS MAY NOT SHOW ALL ITEMS TO BE REMOVED OR RELOCATED.

THE CONTRACTOR MAY FIND IT NECESSARY TO REUSE EXISTING OPENINGS FOR NEW WORK. ANY COST ASSOCIATED WITH ENLARGING OR DECREASING

THE SIZE OF THESE OPENINGS WILL BE THE ELECTRICAL CONTRACTOR'S RESPONSIBILITY.

ALL DEMOLITION SHALL BE COORDINATED WITH THE OTHER TRADES INVOL-VED INCLUDING THE ARCHITECT AND THE OWNER'S REPRESENTATIVE. AA. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR DISPOSING OF

OTHERWISE DIRECTED. INCLUDE CUTTING AND PATCHING ASSOCIATED WITH REMOVAL WORK IN THE BID. BB. ALL CONCEALED UNUSED CONDUITS SHALL BE CUT-OFF BEHIND REMAIN-ING WALLS OR AT FLOORS AS REQUIRED. PATCH OPENING TO MATCH THE EXISTING SURFACE, ALL UNUSED RECESSED ELECTRIC BOXES SHALL BE COVERED AND PATCHED TO MATCH EXISTING WALL SURFACES. EXPOSED

INACTIVE CONDUIT SHALL BE REMOVED BACK TO THE LAST ACTIVE JUNC-

ALL REMOVED EQUIPMENT AND MATERIALS FROM THE JOBSITE UNLESS

CC. <u>SPECIALTY AREAS:</u> SPECIALTY AREAS INCLUDED IN THIS PROJECT ARE: CT SCAN SUITE, CT SCAN EQUIPMENT ROOM, AND CT SCAN CONTROL

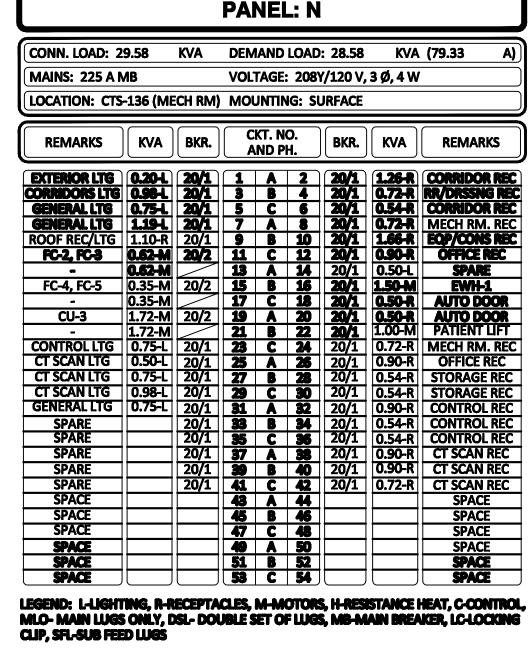
DD. <u>OVERHEAD PAGING</u>: ALL OVERHEAD PAGING HARDWARE IS REQUIRED TO CONNECT TO THE EXISTING VALCOM CAMPUS-WIDE OVERHEAD PAGING SYSTEM. COORDINATE WITH COR AND BIOMEDICAL DEPT.

KVA METHOD OF SHORT CIRCUIT CALCULATION: TRANSFORMER: 75,000 VA, 5% IMPEDANCE ASSUMED 480 / 208y-120 V, 3-PHASE FLC=VA/ (SQ. RT. (3) * VOLTS) = 75,000/ (SQ. RT. (3) * 480V=90A) FLC = FLA / 5% = 90A/5% = 1,800 AMPS

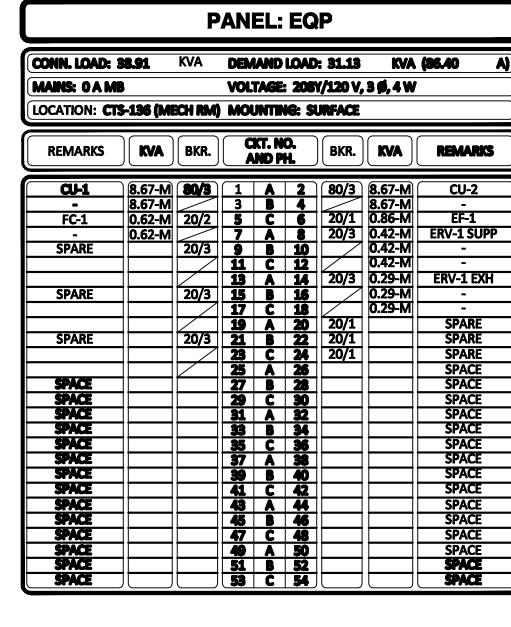
TION BOX OR PANELBOARD.

VOLTAGE DROP CALCULATION: | CONDUCTOR: COPPER (4/0) VOLT/PH: 120/208 3PH. 4W. TOTAL DISTANCE: 200 FT. LOAD: 225 A

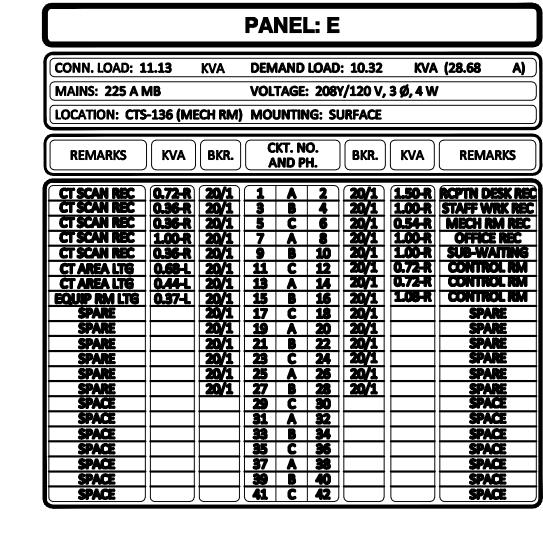
EST. DROP: 2.7 VOLTS LOAD-AT-END: 117.3 VOLTS VOLTAGE DROP: 2.3%



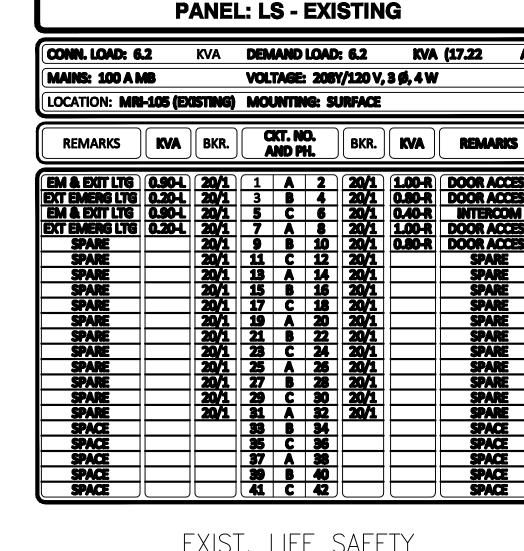
NEW NORMAL POWER



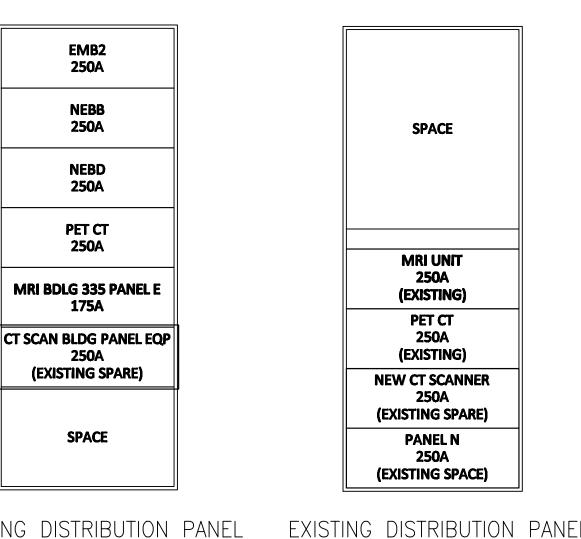
NEW CT SCAN EQUIPMENT (EMERGENCY POWER FOR ENGINEERING EQUIPMENT)



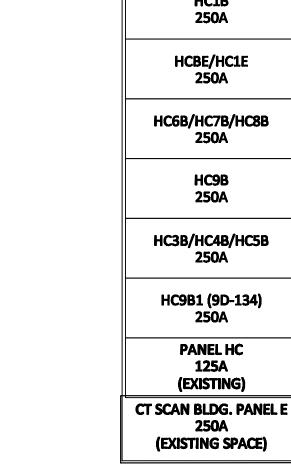
NEW CRITICAL POWER (EMERGENCY POWER FOR MED EQUIPMENT)



EXIST. LIFE SAFETY (LOCATED IN MRI B335) ROOM MRI-105



EXISTING DISTRIBUTION PANEL <u>"NDB" B330</u> <u>"EDP2" B330</u> ROOM BC-119 ELEVATION ROOM BC-119 ELEVATION

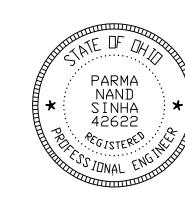


EXISTING DISTRIBUTION PANEL <u>"CDB" B330</u> ROOM BC-119 ELEVATION

3023.00	
SSUED FOR BIDDING	01-31-2013
Revisions	Date

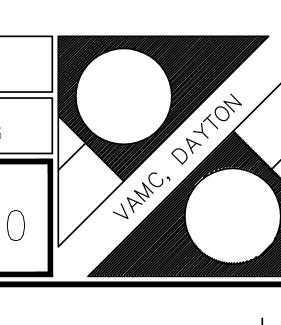
519 Windsor Park Dr., Centerville, Dhio 45459 Phone: (937) 435-3722

CONTECH DESIGN, INCORPORATED Consulting Professional Engineers



Revised By:	Drawing Title
	ELECTR
	SCHEDU
	DETAILS
	Approved: P
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Drawing Title ELECTRICAL	Project Title SITE PREP FOR CT SCA			Date 01-31-2013	
SCHEDULES AND DETAILS			Project N 552-CSI-		
Approved: Project Manager RANDI FIORINA	Building Number Checked PNS	Drawn CONTECH	Drawing	No.	
Approved: Service Chief GARY ABREU	Location 4100 WEST THIRD DAYTON, OH 454		LS	2	



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Engineer Project # 12014

